

CLAIMS

1. A rotary shaft arrangement carrying equipment at one end and extending rearwards from the equipment, the shaft (1) being supported by a first bearing (2) behind the equipment, and by a second bearing (3) behind the first bearing (2), the first bearing (2) being carried by a casing (4) surrounding the shaft (1) and extending rearwards from the first bearing (2) to a stator structure (5) to which the casing (4) is fastened by screws (6) that extend parallel to the shaft (1) and that are fusible in traction,

the arrangement being characterized by the fact that the second bearing (3) is disposed with radial clearance (J) in a bore (7) of an annular support (8) secured to the stator structure (5), and is fastened to said annular support (8) by screws (9) that are parallel to the shaft (1) and that are fusible in shear, whereby the second bearing (3) can bear against said support (8) in the event of said screws (9) rupturing.

2. An arrangement according to claim 1, characterized by the fact that the radial clearance (J) is calibrated so as to avoid friction between the shaft (1) and other elements, whether stationary or moving.

3. An arrangement according to claim 2, characterized by the fact that the radial clearance (J) is no more than 3 mm.

4. An arrangement according to any one of claims 1 to 3, characterized by the fact that the equipment is an entry fan of a turbojet.

5. An arrangement according to any one of claims 1 to 4, characterized by the fact that the second bearing (3) includes an outer ring (10) which presents an outwardly-directed radial annular flange (11) that is pressed

against a side face of the annular support (8) by the fusible screws (9).

5 6. An arrangement according to claim 5, characterized by the fact that the outer ring (10) is maintained centered in the bore (7) of the annular support (8) by a plurality of studs (25) extending parallel to the shaft (1), said studs being calibrated to shear in the event of the second bearing becoming uncoupled.

10 7. An arrangement according to claim 6, characterized by the fact that the studs are provided on the annular support (8) and extend from the periphery of the flange (11).

15 8. An arrangement according to claim 7, characterized by the fact that the annular support (8) has three studs that are regularly distributed around the axis of the bore.

20 9. An arrangement according to any one of claims 1 to 8, characterized by the fact that means are provided to prevent the outer ring (10) from turning in the event of the second bearing (3) becoming uncoupled.

25 10. An arrangement according to claim 9, characterized by the fact that the means for preventing the outer bearing (10) from turning in the event of uncoupling comprise at least one pin (22) anchored in the annular support (8) passing with clearance through an orifice (21) formed in the flange (11).

30 11. An arrangement according to claim 10, characterized by the fact that pin (22) includes a pin head (23) bearing against the outside face of the flange (11) so as to prevent the second bearing (3) from moving axially in the event of the second bearing becoming uncoupled.

12. An arrangement according to claim 10 or claim 11,
characterized by the fact that it has three pins (22)
that are regularly distributed around the axis of the
5 bore (7).